

**MATLA POWER STATION MONTHLY EMISSIONS REPORT**

Atmospheric Emission License 17/4/AEL/MP312/11/14



**1 RAW MATERIALS AND PRODUCTS**

Raw Materials and Products	Raw Material Type	Units	Maximum Permitted Consumption Rate	Consumption Rate Nov-2020
	Coal	Tons	1 475 000	864 206
	Fuel Oil	Tons	2 500	422

Production Rates	Product / By-Product Name	Units	Maximum Production Capacity Permitted	Production Rate Nov-2020
	Energy	GWh	2 484	1 543
	Ash	Tons	471 000	257 101
	RE PM	kg/MWh	not specified	0,291

**2 ENERGY SOURCE CHARACTERISTICS**

Coal Characteristic	Units	Stipulated Range	Monthly Average Content
Sulphur Content	%	0.8-1.1	1,00
Ash Content	%	21-40	29,75

### 3 EMISSION LIMITS (mg/Nm<sup>3</sup>)

Associated Unit/Stack	PM	SO <sub>2</sub>	NO
South	200	3500	1200
Unit 4	200	3500	1200
Unit 5	100	3500	1200
Unit 6	100	3500	1200

### 4 ABATEMENT TECHNOLOGY (%)

Associated Unit/Stack	Technology Type	Efficiency Nov-2020
South	<i>Electro Static Precipators (ESP)</i>	<i>99,823%</i>
Unit 4	<i>Electro Static Precipators (ESP)</i>	<i>99,753%</i>
Unit 5	<i>Electro Static Precipators (ESP)</i>	<i>Unit off</i>
Unit 6	<i>Electro Static Precipators (ESP)</i>	<i>99,809%</i>

Note: Abatement plant does not have bypass mode operation, hence plant 100% Utilised.

### 5 ABATEMENT TECHNOLOGY (%)

Associated Unit/Stack	PM	SO <sub>2</sub>	NO	CO <sub>2</sub>	O <sub>2</sub>
South	<i>100,0</i>	<i>98,2</i>	<i>98,2</i>		<i>100,0</i>
Unit 4	<i>86,1</i>	<i>100,0</i>	<i>100,0</i>		<i>100,0</i>
Unit 5					
Unit 6	<i>91,1</i>	<i>100,0</i>	<i>100,0</i>		<i>100,0</i>

### 6 EMISSION PERFORMANCE

Table 6.1: Monthly tonnages for the month of November-2020

Associated Unit/Stack	PM	SO <sub>x</sub>	NO <sub>x</sub>
Unit 1	83,0	3 126,3	958,3
Unit 2	68,2	2 840,2	864,1
Unit 3	91,8	3 393,2	1 038,4
Unit 4	118,0	3 848,4	1 366,4
Unit 5	0,0	0,0	0,0
Unit 6	88,1	3 183,2	1 249,2
<b>SUM</b>	<b>449,1</b>	<b>16 391,2</b>	<b>5 476,4</b>

Table 6.2: Operating days in compliance to PM AEL Limit - November 2020

Associated Unit/Stack	Normal	Grace	Section 30	Contra-vention	Total Exceedance	Average PM (mg/Nm <sup>3</sup> )
South	29	1	0	0	1	57,6
Unit 4	30	0	0	0	0	64,4
Unit 5	0	0	0	0	0	
Unit 6	25	4	0	0	4	60,3
<b>SUM</b>	<b>84</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>5</b>	





Table 6.3: Operating days in compliance to SOx AEL Limit - November 2020

Associated Unit/Stack	Normal	Grace	Section 30	Contra-vention	Total Exceedance	Average SOx (mg/Nm <sup>3</sup> )
South	30	0	0	0	0	2 152,9
Unit 4	30	0	0	0	0	2 112,9
Unit 5	0	0	0	0	0	
Unit 6	30	0	0	0	0	2 167,6
<b>SUM</b>	<b>90</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	

Table 6.4: Operating days in compliance to NOx AEL Limit - November 2020

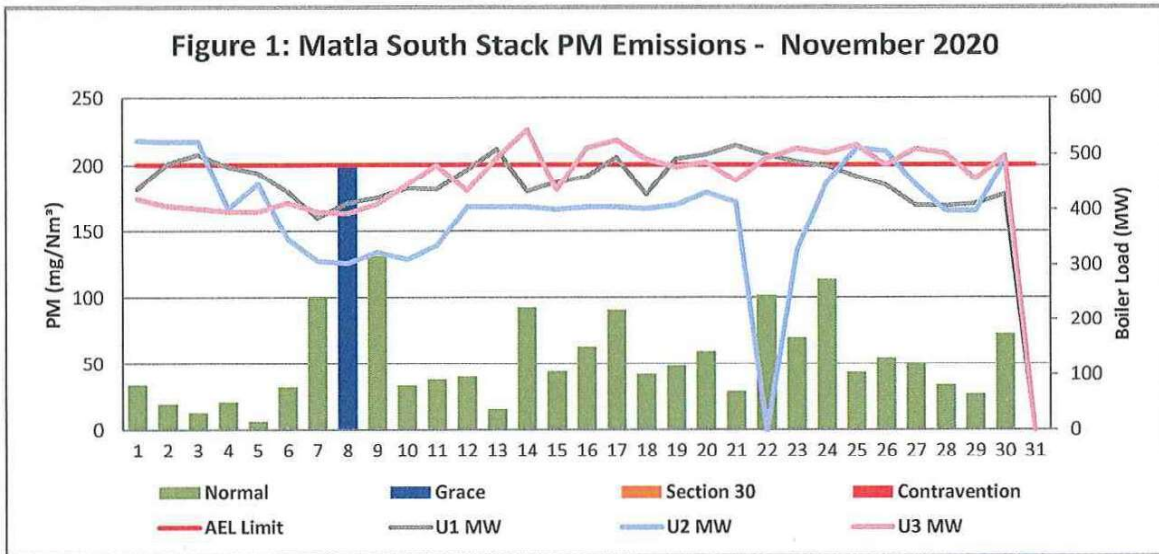
Associated Unit/Stack	Normal	Grace	Section 30	Contra-vention	Total Exceedance	Average NOx (mg/Nm <sup>3</sup> )
South	30	0	0	0	0	657,0
Unit 4	30	0	0	0	0	750,7
Unit 5	0	0	0	0	0	
Unit 6	30	0	0	0	0	843,0
<b>SUM</b>	<b>90</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	

Table 6.5: Legend Description

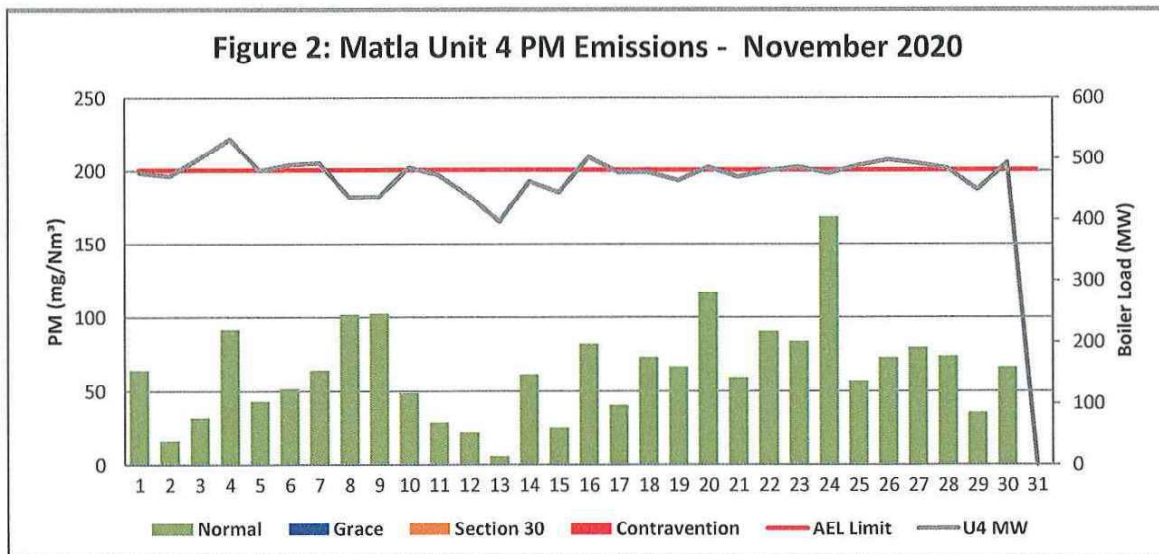
Condition	Colour	Description
Normal		Emissions below Emission Limit Value (ELV)
Grace		Emissions above the ELV during grace period
Section 30		Emissions above ELV during a NEMA S30 incident
Contra-vention		Emissions above ELV but outside grace or S30 incident conditions



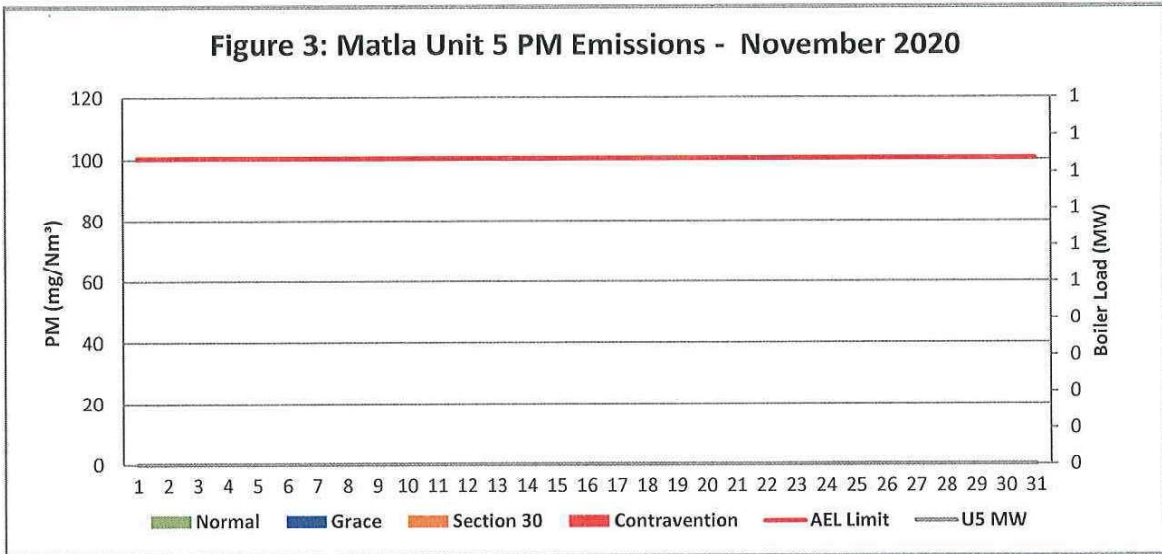
**Figure 1: Matla South Stack PM Emissions - November 2020**



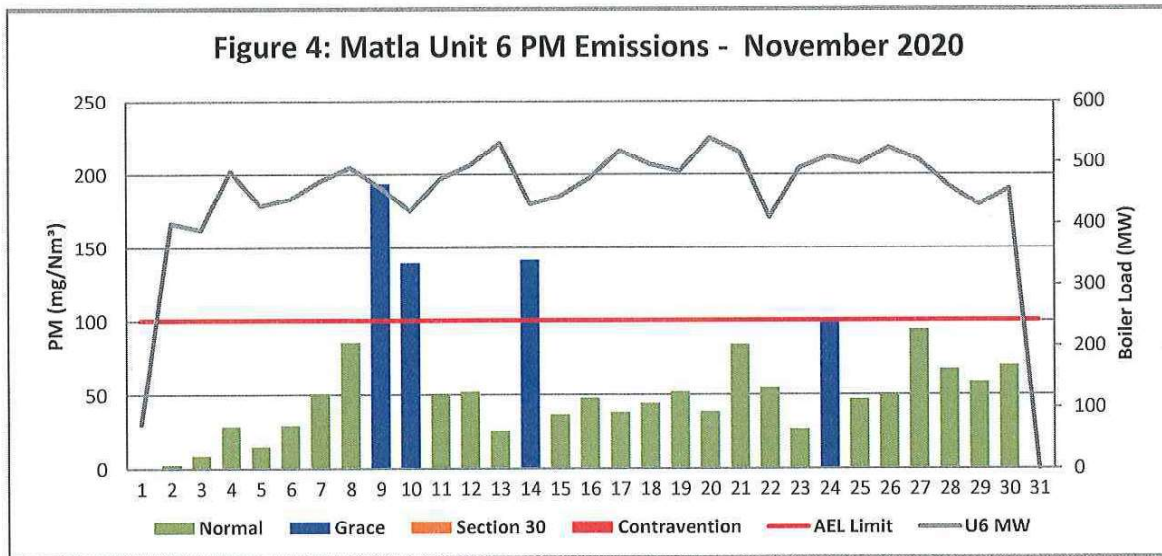
**Figure 2: Matla Unit 4 PM Emissions - November 2020**



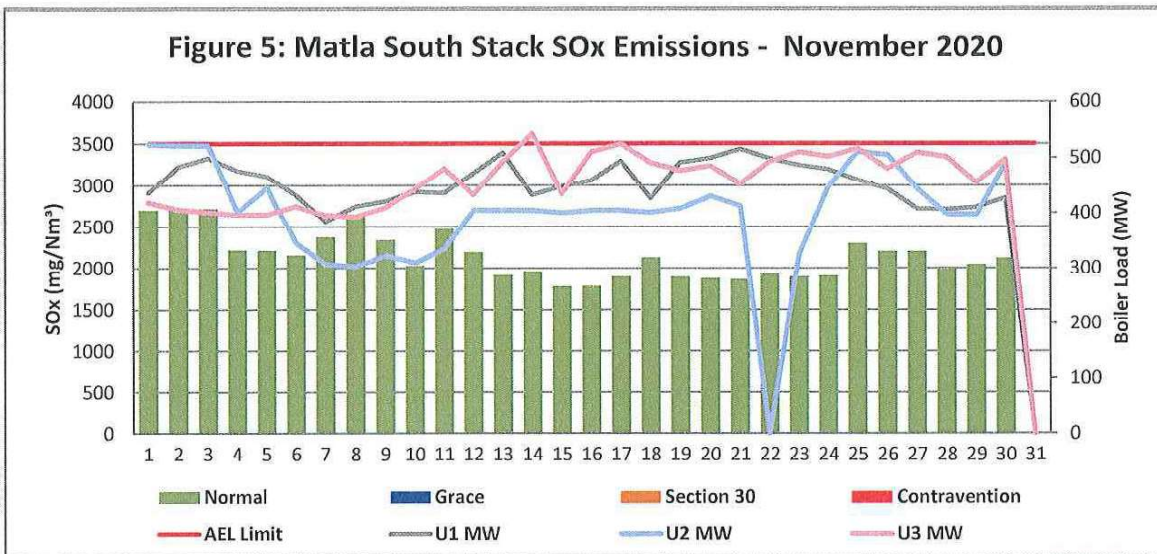
**Figure 3: Matla Unit 5 PM Emissions - November 2020**



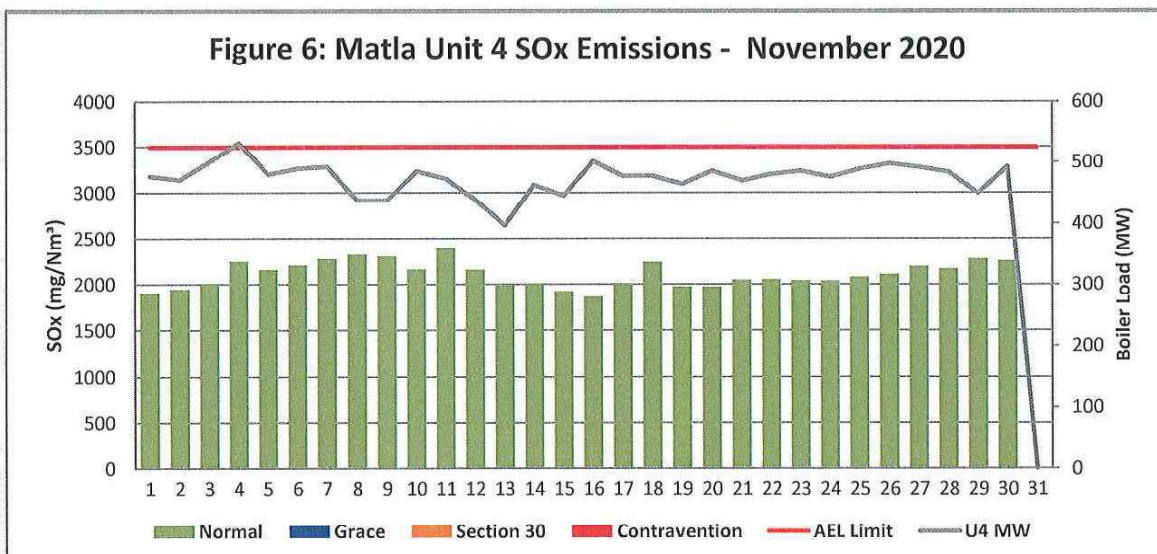
**Figure 4: Matla Unit 6 PM Emissions - November 2020**



**Figure 5: Matla South Stack SOx Emissions - November 2020**

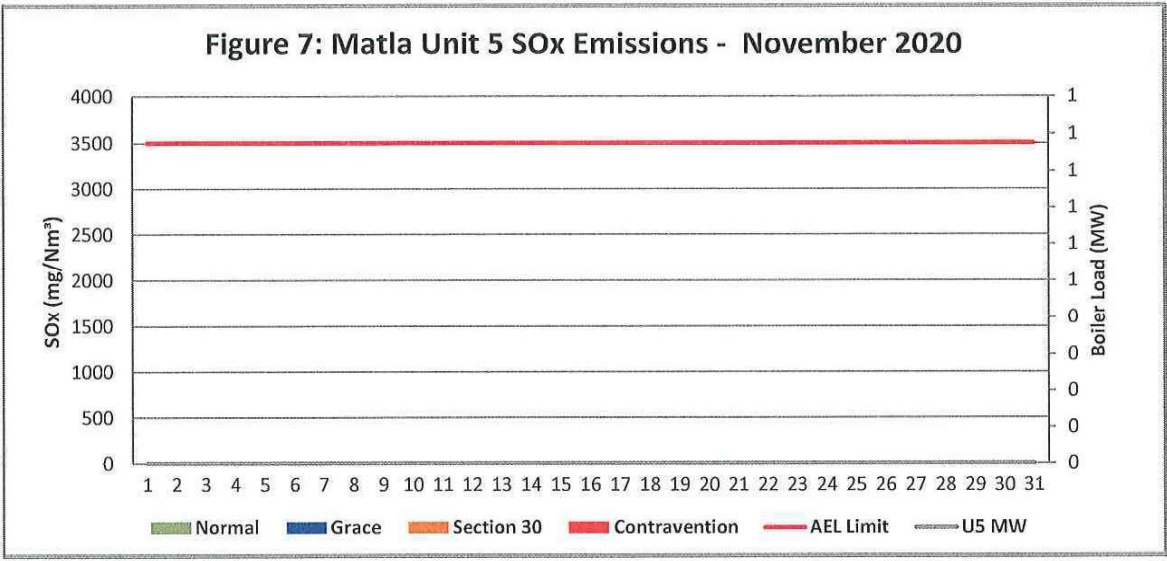


**Figure 6: Matla Unit 4 SOx Emissions - November 2020**

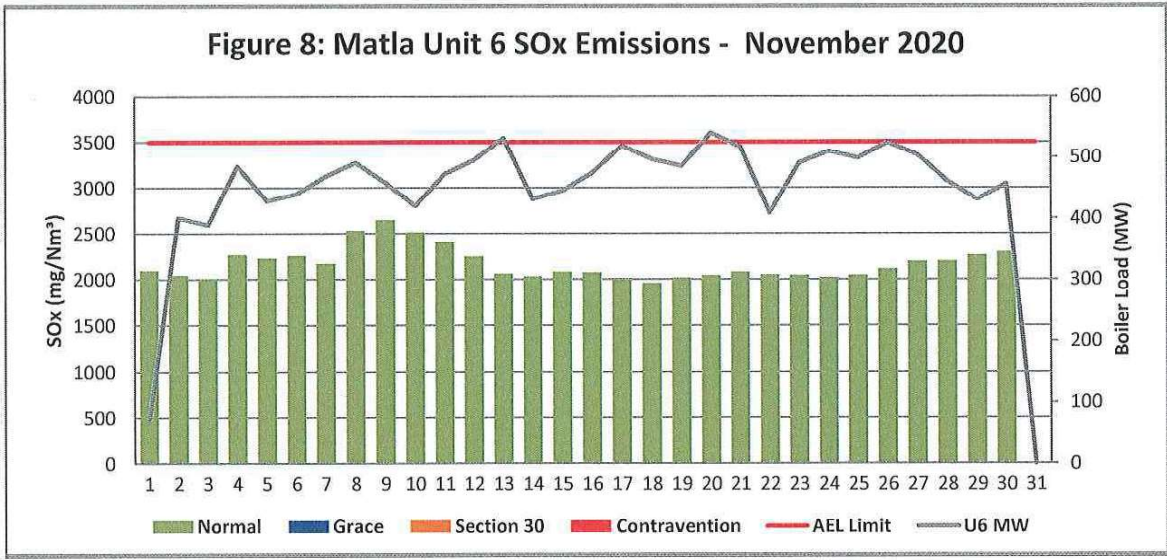




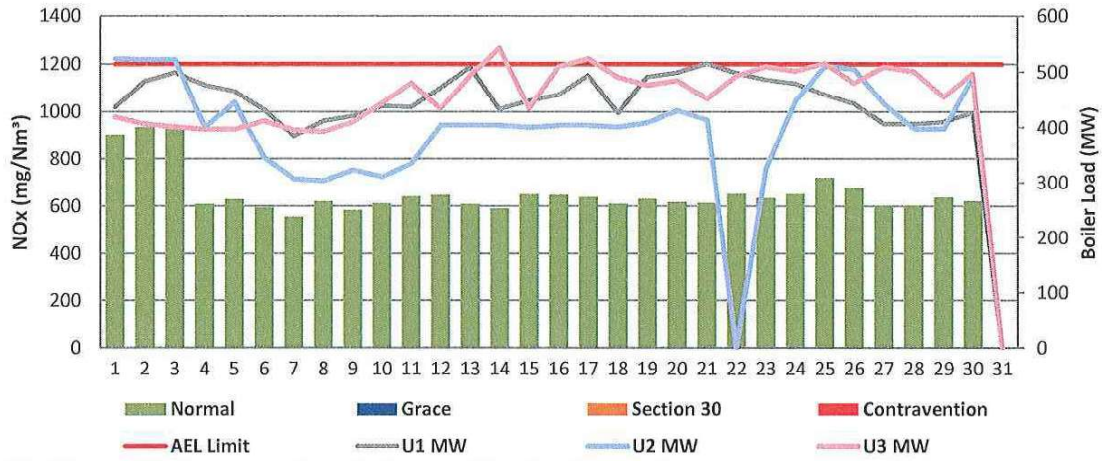
**Figure 7: Matla Unit 5 SOx Emissions - November 2020**



**Figure 8: Matla Unit 6 SOx Emissions - November 2020**



**Figure 9: Matla South Stack NOx Emissions - November 2020**



**Figure 10: Matla Unit 4 NOx Emissions - November 2020**

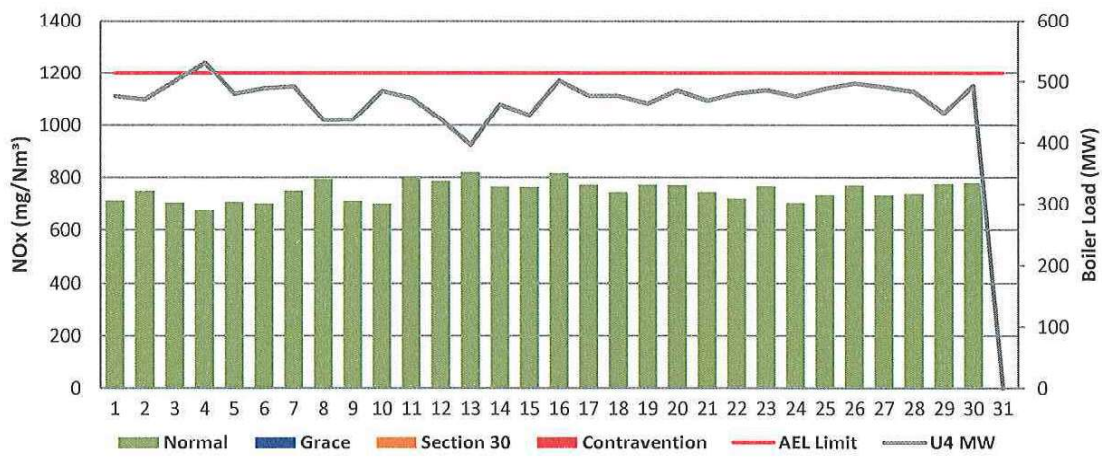




Figure 11: Matla Unit 5 NOx Emissions - November 2020

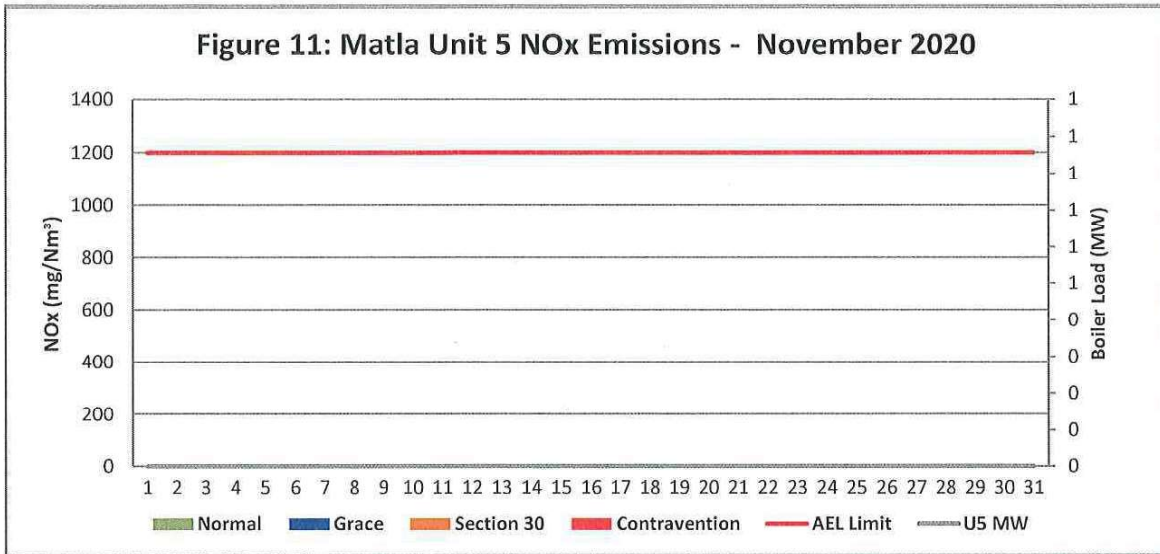
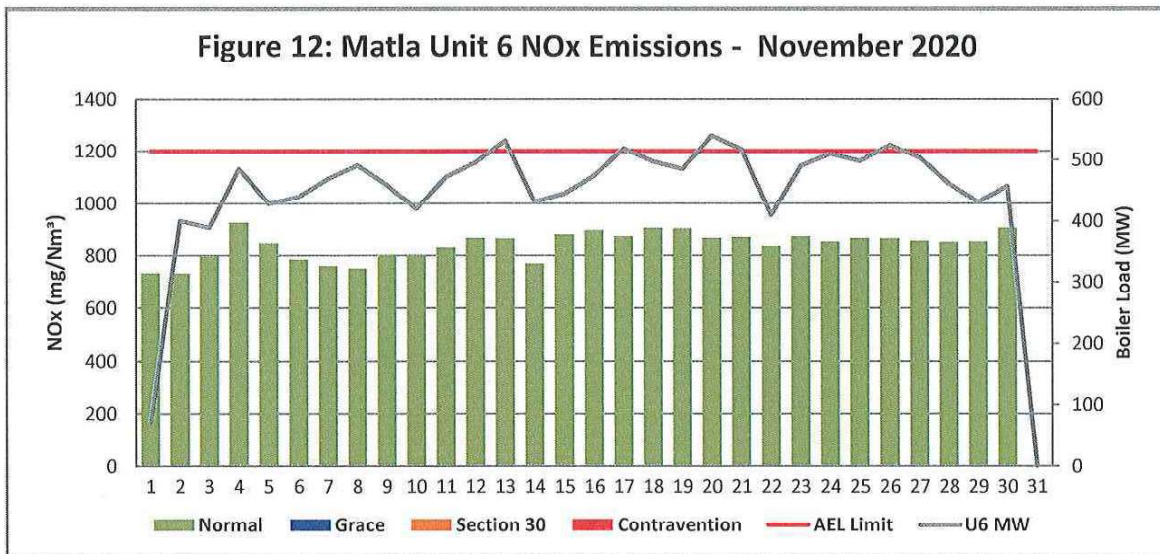


Figure 12: Matla Unit 6 NOx Emissions - November 2020



## 7 SHUT DOWN AND LIGHT UP INFORMATION

Table 7.1. PM Start-up information for the month of November-2020

South Stack	<i>Event 1</i>		<i>Event 2</i>		<i>Event 3</i>		<i>Event 4</i>	
Unit No.	<i>Unit 2</i>		<i>no event</i>		<i>no event</i>		<i>no event</i>	
Breaker Open (BO)	<i>12:30 PM</i>	<i>2020/11/21</i>						
Draught Group (DG) Shut Down (SD)	<i>6:20 AM</i>	<i>2020/11/22</i>						
BO to DG SD (duration)	<i>00:17:50</i>	DD:HH:MM		DD:HH:MM		DD:HH:MM		DD:HH:MM
Fires in time	<i>6:25 PM</i>	<i>2020/11/22</i>						
Synch. to Grid (or BC)	<i>4:00 PM</i>	<i>2020/11/23</i>						
Fires in to BC (duration)	<i>00:21:35</i>	DD:HH:MM		DD:HH:MM		DD:HH:MM		DD:HH:MM
Emissions below limit from BC (end date)	<i>12:00 AM</i>	<i>2020/11/24</i>						
Emissions below limit from BC (duration)	<i>00:08:00</i>	DD:HH:MM		DD:HH:MM		DD:HH:MM		DD:HH:MM

South Stack ...cont.	<i>Event 5</i>		<i>Event 6</i>		<i>Event 7</i>		<i>Event 8</i>	
Unit No.	<i>no event</i>		<i>no event</i>		<i>no event</i>		<i>no event</i>	
Breaker Open (BO)								
Draught Group (DG) Shut Down (SD)								
BO to DG SD (duration)		DD:HH:MM		DD:HH:MM		DD:HH:MM		DD:HH:MM
Fires in time								
Synch. to Grid (or BC)								
Fires in to BC (duration)		DD:HH:MM		DD:HH:MM		DD:HH:MM		DD:HH:MM
Emissions below limit from BC (end date)								
Emissions below limit from BC (duration)		DD:HH:MM		DD:HH:MM		DD:HH:MM		DD:HH:MM

Unit No. 4	Event 1		Event 2		Event 3		Event 4	
Breaker Open (BO)								
Draught Group (DG) Shut Down (SD)								
BO to DG SD (duration)		DD:HH:MM		DD:HH:MM		DD:HH:MM		DD:HH:MM
Fires in time								
Synch. to Grid (or BC)								
Fires in to BC (duration)		DD:HH:MM		DD:HH:MM		DD:HH:MM		DD:HH:MM
Emissions below limit from BC (end date)								
Emissions below limit from BC (duration)		DD:HH:MM		DD:HH:MM		DD:HH:MM		DD:HH:MM

Unit No. 5	Event 1		Event 2		Event 3		Event 4	
Breaker Open (BO)								
Draught Group (DG) Shut Down (SD)								
BO to DG SD (duration)		DD:HH:MM		DD:HH:MM		DD:HH:MM		DD:HH:MM
Fires in time								
Synch. to Grid (or BC)								
Fires in to BC (duration)		DD:HH:MM		DD:HH:MM		DD:HH:MM		DD:HH:MM
Emissions below limit from BC (end date)								
Emissions below limit from BC (duration)		DD:HH:MM		DD:HH:MM		DD:HH:MM		DD:HH:MM

Unit No. 6	Event 1		Event 2		Event 3		Event 4	
Breaker Open (BO)								
Draught Group (DG) Shut Down (SD)								
BO to DG SD (duration)		DD:HH:MM		DD:HH:MM		DD:HH:MM		DD:HH:MM
Fires in time	3:20 AM	2020/11/01						
Synch. to Grid (or BC)	11:20 PM	2020/11/01						
Fires in to BC (duration)	00:20:00	DD:HH:MM		DD:HH:MM		DD:HH:MM		DD:HH:MM
Emissions below limit from BC (end date)	9:00 AM	2020/12/03						
Emissions below limit from BC (duration)	31:09:40	DD:HH:MM		DD:HH:MM		DD:HH:MM		DD:HH:MM

7.2: Point Source emissions released during start-up (fires-in) and Shut-down (SD) for the month of November-2020 in mg/Nm<sup>3</sup>

[Include reference to once off test showing typical emissions rates during fires in and SD]



Remember to add attachments here; see ReportAddendum Tab

Reserved for Addendum XXXX



